belongs to the western race, as probably all of the Gallatin County birds of this species do.

Pinicola enucleator alascensis. Alaska Pine Grosbeak.— Two birds taken near Bozeman, December 21, 1908, have been sent to Mr. Robert Ridgway for better identification, and are considered by him to be the Rocky Mountain Pine Grosbeak, *P. e. montana*, and identical with the summer birds of the region.

The following new species may be added to the list through the observations of Mr. G. B. Thomas.

Marila collaris. Ring-necked Duck.— Mr. Thomas secured two birds of this species near Belgrade on October 10, 1912. They were male and female and were from a flock of eight or nine birds. This is the first record of this species from Montana of which I am aware.

Anthus spraguei. Sprague's Pipit.— Mr. Thomas has written me that he has seen this bird in Gallatin County, but I have been unable to get from him the date or exact locality of this occurrence.—Aretas A. Saunders, *West Haven, Conn.*

What Bird Lovers Owe the Late Professor King.— Not the man who determines how many birds eat a certain insect, nor what one bird eats, but the man who passes in review all the common birds of a given region in his study of the proportions of the food, is entitled to rank as pioneer in Economic Ornithology. On this basis it is proposed that the late Professor F. H. King, formerly chief of the U. S. Division of Soils, should be considered our first important Economic Ornithologist to use modern methods in the United States.[1]

Many men had previously examined the food of a single species of bird in different parts of the country. Professor Samuel Aughey of Nebraska, from 1865 to 1877, studied the stomachs of Nebraska birds in relation to the number of locusts they consumed. However, not until the time of Professors S. A. Forbes of Illinois and F. H. King of Wisconsin, had anyone made a study of all the common bird species in order to record all the types of insects which birds ate. Dr. Forbes' studies of birds' stomachs were first published in 1876, according to a letter from him, dated October 15, 1912.

In an interview at the Cleveland meetings of the American Association for the Advancement of Science, December 31, 1912, Professor Forbes admitted that the work for this paper was all done in that or the preceding year, while Professor King began his paper in July, 1873, and continued it until October, 1877, the field work being done mostly in 1873–4. In 1876–8, according to a letter from Prof. J. H. Comstock, 1912, Professor King worked in the Cornell laboratory, analyzing the contents of the birds'

[1] Cf. Review of Economic Ornithology in the United States by T. S. Palmer, Asst. Chief of the Biol. Survey, U. S. Dept. Agric. Yearbook for 1899. Here older authors are ranked as pioneers in the study of the food in birds' stomachs.

stomachs previously collected, but did not publish, due to delays in the Geological Survey, until 1883, when T. C. Chamberlain's 'Geology of Wisconsin,' Vol. 1, came off the press.

It thus appears that King's work began before that of Dr. Forbes, but was delayed in publication until some years after Dr. Forbes published his first and second researches. While Prof. Aughey had studied ninety different bird species representing 630 stomachs and Dr. Forbes some 40 species representing 460 stomachs (combining figures of all three papers of 1876, 1880 and 1883), Professor King studied 83 species representing over 1800 stomachs, 1600 of these being reported.

The University of Wisconsin has been slow to recognize the great value of Professor King's researches along this line and the noteworthy character of his work. We should take some steps to make generally available the statistical data of the paper as published in the ponderous volumes of the early 80's.

In view of these facts, a partial bibliography of Professor King's writings concerning birds may be recorded here.

1883. Economic Relations of our Birds.— Geol. of Wis., Vol. 1, pp. 441–610 (1886). Reproduced in Trans. Wis. Sta. Agric. Soc. for 1886, vol. XXIV, pp. 372–480.

1884. The Industrial Relations of Our Birds.— Trans. Wis. Sta. Agric. Soc. for 1882–3, vol. XXI, pp. 261–271.

1892. The Migration and Usefulness of Our Birds.— Arbor Day Circular, Wisconsin.

1893. The Robin.— Arbor and Bird Day Annual, Wisconsin, pp. 32–4.

1896. (Mar. 19) The Ruffed Grouse.— Arbor Day Annual, May 1, 1896, Wisconsin, pp. 23–5.

1897. (March 24) The Blue-eyed Yellow Warbler.— Arbor and Bird Day Annual, April 30, 1897, Wisconsin, pp. 8–10.

1899. (March 13) The Migration and Usefulness of Our Birds.— Arbor and Bird Day Annual, May 12, 1899, pp. 34–7. (A reprint of 1892 circ., out of print.)

1911. (Bird Migration at Hong Kong Island) Farmers of Forty Centuries. p. 62.— Pub. at Madison, Wis., by Mrs. F. H. King.— A. C. Burrill, *Madison, Wis.*

Morning Awakening Notes at Jefferson Highland, N. H.— Mr. Francis H. Allen in his general note in 'The Auk,' January, 1915, p. 110, again calls in question the genuineness of the early songs which precede the singing of the Robin as morning songs given in response to the break of day, still regarding them as songs of night. Others may share in some measure his incredulity. I desire, therefore, that my records obtained at Jefferson Highland, N. H., should remove this doubt, for they show conclusively season by season that there not only do Song Sparrows and Chipping Sparrows habitually sing several times before the Robin, but that Wood Pewee and Alder Flycatcher are always much earlier singers, and that